



# Testing Reagents



Hach is the world's leading supplier of water testing equipment that provides accurate, efficient and easy to carry out water analysis. A wide selection of measuring equipment is available for field and laboratory use that can test various parameters, all of which need specific reagents. The commonly used ones are detailed below, though others for more specialised parameters are available on request.

### **PHYSIOCHEMICAL TESTS**

Parameter	Reagents	Range	Tests/Packet
Alkalinity	Alkalinity Reagent Set for Digital Titrator	10 - 4,000 mg/L CaCO <sub>3</sub>	
	Alkalinity (Total) TNTplus Vial Test, 25 vials	25 – 400 mg/L CαCO <sub>3</sub>	
	Alkalinity Test Kit	0 - 400 mg/L CaCO <sub>3</sub>	]
Aluminium	AluVer 3 Aluminum Reagent Powder Pillows	0.008 - 0.800 mg/L Al	1
	Aluminum Reagent Set, Aluminon	0.008 - 0.800 mg/L Al	
	Aluminum Reagent Set, ECR method	0.002 - 0.220 mg/L, Al	]
	Nessler Reagent Solution, 500mL, 1000mL	0.02 - 2.50 mg/L NH <sub>3</sub> -N	]
Ammonia/	Ammonium Ionic Strength Adjustor (ISA) Powder	0.01 - 10 mg/L NH <sub>3</sub> -N	Pk/100
Ammonium	Ammonia TNTplus Vial Test, ULR, 25 vials	0.15 – 2.00 mg/L NH <sub>3</sub> -N	
	Ammonia Salicylate Reagent Powder Pillows	0.01 - 0.50 mg/L NH <sub>3</sub> -N	
Barium	Bariver3, Barium Reagent Powder Pillows	2 - 100 mg/L Ba	
Boron	Borover 3,Boron Reagent Powder Pillows	0.2 14.0 mg/LP	
ьогоп	Boron Standard Solution, 1000 mg/L as B (NIST),100mL	0.2 - 14.0 mg/L B	
Calcium Hardness	Hardness (Calcium) Reagent Set, LR & HR for Digital Titrator or Buret	10 -160 mg/L;100 - 4,000 mg/L; 0 - 5,000 mg/L CaCO <sub>3</sub>	
Chlorine	Chlorine (Free and Total) Reagent Set, DPD, Powder Pillows	0.02 - 2.00 mg/L Cl <sub>2</sub>	Pk/1000
(Free/Total)	Free Chloride DPD Reagent Powder Pillows	0.1 - 10.0 mg/L Cl2 0.05 - 4.00 mg/L Cl <sub>2</sub>	
Chloride	Chloride Reagent Set, Silver Nitrate Digital Titrator, Full Range	10 - 100mg/L; 100-10,000mg/Cl	Pk/100
	Chlorine Reagent Set, Mercuric Nitrate Digital Titrator	10 - 160mg/L; 100-8,000mg/L Cl	
Copper	CuVer® 1 Copper Reagent Powder Pillows	Up to 5.00 mg/L Cu	
Fluoride	Fluoride Ionic Strength Adjustor (ISA) Powder Pillows	0.01 mg/L to saturated	Pk/250
	SPADNS 2 (Arsenic-free) Fluoride Reagent Solution, 1,000mL	0.02 - 2.00 mg/L F-	
Iron	FerroVer Iron Reagent Powder Pillows	0.02-3.00mg/L Fe	Pk/100

Parameter	Reagents	Range	Tests/Packet
Manganese	Manganese Reagent Set, LR, PAN	0.006 - 0.700 mg/L Mn	Pk/100
Mungunese	Manganese Reagent Set, HR, Periodate Oxidation	0.1-20.0 mg/L Mn	
Magnesium	Hardness Reagent Set, Calmagite Colorimetric	$0.05$ - $4.00$ mg/L $CaCO_3$	
Nitrate	NitriVer® 3 Nitrite Reagent Powder Pillows	0.1 to 10.0 or 0.3 to 30.0 mg/L as nitrate-N	
Nitrite	NitriVer® 2 Nitrite Reagent Powder Pillows	2 - 250 mg/L NO <sub>2</sub>	
Phosphorus/ Phosphate	PhosVer® 3 Phosphate Reagent Powder Pillows	0.02 - 2.50 mg/L PO₄	
Potassium	Potassium Reagent Set	0.1 - 7.0 mg/L K	
Silica	Silica Reagent Set, High Range	1 - 100 mg/L SiO <sub>2</sub>	
Sodium	Sodium/Potassium Ionic Strength Adjustor (ISA) Powder Pillows	10 - 2,000 μg/L Na+	
Sulpates	SulfaVer® 4 Sulfate Reagent Powder Pillows	2 to 70 mg/L SO <sub>4</sub>	
Total Hardness	Hardness (Total) Reagent Set, LR,HR for Digital Titrator	10-160 mg/L; 100-4,000 mg/L CaCO₃	
	Hardness Reagent Set, Calmagite Colorimetric	$0.05$ - $4.00$ mg/L as $CaCO_3$	]
Zinc	ZincoVer® 5 Zinc Reagent Powder Pillows	0.01 to 3.00 mg/L Zn	1

# **BACTERIOLOGICAL TESTS**

Parameter	Reagents	Tests/Packet	
Total Coliforms and E.Coli	Prepared agar plates m-ColiBlue24 - Ready-to-use media and give simultaneous results for total coliforms and E. coli	Pk/15	
Enterococci	m-El prepared agar plates - Detection by the membrane filtration method (MF)		
Total Bacteria	Total Bacteria Media Set	Pk/25	
Pseudomonas Aeruginosa	Pseudomonas Broth, Plastic Ampules	Pk/50	
Iron-related Bacteria	BART test, iron-related bacteria	Pk/9	

### **WASTE WATER TESTS**

Parameter	Reagents	Range	Tests/Packet
BOD	Nitrification Inhibitor for BOD, Formula 2533, TCMP	Nitrification Inhibitor	2500
COD	COD Digestion Vials, High Range	20 -1500 mg/L CO	Pk/150
Total Nitrogen	Nitrogen, total, TNT	0.5 - 25 mg/L N	25 to 50 tests
Total Organic	TOC TNTplus Vial Test	0.06 - 3.5 mg/L PO₄	25 tests

# **HEAVY METALS**

Parameter	Reagents	Range	Tests/Packet
	Arsenic Low Range, LR Test Kit	0 - 500 ppb As	
Arsenic	Arsenic High Range, HR Test Kit	0 - 4000 ppb As	Pk/100
Chromium	Chromium Total Reagent Set	0.10 - 0.700mg/L	

# **STANDARD SOLUTIONS**

Parameter	Reagents	Range	
PH	Buffer	рН 4.01,рН 7.00, рН10.00	
	Conductivity Standard Solution	1,412 μS/cm ±10% at 25°C, 745.5 mg/L ±10%, 0.01M Kcl	
Conductivity (EC) Standards	Singlet Single-use Conductivity Standard Solution	1,413 μS/cm, Kcl	
	Conductivity Standard Solution	18,000 μS/cm, NaCl	
	Sodium Chloride Standard Solution	491 mg/L NaCl (1,000 μS/cm)	
Total Dissolved Solids (TDS) Standard	Natural Water Standard Solution	3000ppm TDS	
Other Standards	Chemical reagent standards, Spectrophotometer standards, Turbidity meter standards, Hqd meter standards.		